

Notice of Allowability

Application No.

09/581,804

Examiner

Rip A. Lee

Applicant(s)

YOO ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to October 20, 2004.
2. ☒ The allowed claim(s) is/are 1, 2 and 5-11.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

Allowable Subject Matter

The following is an examiner's statement of reasons for allowance: Claims 1, 2, and 5-11 are allowed over the closest references, U.S. Patent No. 4,767,833 to Yumoto *et al.*, U.S. Patent No. 4,520,165 to Zabrocki *et al.*, U.S. Patent No. 4,851,408 to Trabert *et al.*, and U.S. Patent No. 6,080,815 to Lee *et al.*

The present invention is drawn to a transparent thermoplastic resin comprising 3-15 pw of small aperture polybutadiene latex (600-1500 Å, gel content greater than 80 and not exceeding 95 %, swelling index 12-30), 5-25 pw of large aperture polybutadiene latex (2600-5000 Å, gel content greater than 80 and not exceeding 95 %, swelling index 12-30), 40-70 pw of a (meth)acrylic alkyl ester compound, 15-30 pw of a vinyl aromatic compound, and 1-20 pw of a vinylcyan compound wherein the total refraction coefficient of the composition, excluding the polybutadiene rubber latex is between 1.510-1.526.

Yumoto *et al.* discloses a composition comprised of 50-95 pw of a mixture of monomers (acrylics, vinyl aromatics, optional vinylcyan) and 5-50 pw of rubber comprising 40-80 wt % of a styrene-butadiene copolymer (500-2000 Å, gel content of 30-100 %) and 20-60 wt % of styrene-butadiene copolymer (2000-30,000 Å, gel content of 10-80 %).

Zabrocki *et al.* teaches a molding composition comprised of 10-65 wt % of a graft polymer and 35-90 wt % of styrene-acrylonitrile copolymer. The graft polymer is prepared by emulsion polymerization of styrene and acrylonitrile in the presence of a small polybutadiene latex (800-2500 Å, gel content of 30-100 %, swelling index of 5-50)

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and a large polybutadiene latex (8000-60,000 Å, gel content of less than 85 %, swelling index of greater than or equal to 25).

Trabert *et al.* discloses a graft product prepared by grafting at least one of styrene, acrylonitrile, and methyl methacrylate monomers with 20-80 wt % of a small rubber latex (500-1900 Å, gel content 90-95 %) and 20-80 wt % of a large rubber latex (2000-10,000 Å, gel content 90-95 %). The graft product is incorporated in an amount of 3-35 wt% into a thermoplastic polyamide composition.

Lee *et al.* teaches a composition prepared from 20-60 wt % of a vinyl cyanide compound, 40-80 wt % of a vinyl aromatic compound, and 30-80 wt % of a rubber latex comprised of less than 20 wt % of a small rubber latex (700-1500 Å, gel content of 90-100 %, swelling index less than 20) and 80-100 wt % of a large rubber latex (2500-3500 Å, gel content of 90-100 %).

None of the prior art discloses the subject matter of the present claims and none represents obvious variants of the present invention. As such, the present invention is deemed novel over the cited prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rip A. Lee whose telephone number is (571)272-1104. The examiner can be reached on Monday through Friday from 9:00 AM - 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu, can be reached at (571)272-1114. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <<http://pair-direct.uspto.gov>>. Should you have questions on the access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).


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February 16, 2005


DAVID W. WU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700